Dynamos for Diversity

How Higher Education Can Build a More Equitable Society

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Foreword

n November 8, 1965, President Lyndon
Johnson signed the Higher Education Act,
ushering in an era of massive federal support
for college students through an array of new programs:
tuition grants, guaranteed student loans, and workstudy funds.

President Johnson saw higher education as a solution to racial and income inequality during a time of upheaval and changing attitudes about race in the country. "Higher education is no longer a luxury," the president told Congress the previous January, "but a necessity."

Since then, much of the focus in higher education has been on access to college for underrepresented students. As a sign of progress, colleges and universities are quick to tout the racial and ethnic makeup of the student body on their campuses.

But today, in the midst of another racial reckoning in the country, the conversation about inequities in higher education and society more broadly must evolve into one that is about much more than enrollment numbers.

While colleges have condemned racism and crafted diversity, equity, inclusion, and belonging plans, many of their approaches stop short of helping underrepresented students succeed after college. Ensuring that success requires universities to help students understand the pathways to rewarding careers—and then connect them to the skills, opportunities, and employers that will get them started on those pathways.

While access and completion for students of color remain important, it's what happens for graduates afterwards that most defines how well colleges and universities live up to their role in creating a more equitable society. As a result, we need to pay greater attention to all of the steps, big and small, that impact outcomes: encouraging students into majors that matter in the job market, securing internships during college, and finding jobs with organizations that are diverse and will lead to better opportunities for employees over a lifetime. These are the issues that are explored in *Dynamos for Diversity*.

Focusing on degree completion is not enough.

Underemployment—defined as someone who has a bachelor's degree working in a job that does not typically require one—is significantly higher for Black and Hispanic college graduates than for whites and Asians. The latter two groups also out-earn their peers at all education levels.

We hope that the data and insights in the pages ahead give your institution a blueprint for setting all of your students on a path to greater success—and ultimately living up to President Johnson's promise from more than 50 years ago of higher education as the great equalizer.

Jeffrey Selingo

Higher education author and special advisor to the president, Arizona State University

Introduction

he imperative for building educational opportunities that serve everyone and give them the skills needed for the fastest-growing jobs has never been greater.

The world of work was already undergoing a massive shift before the Covid-19 pandemic as a wave of automation and digital technology altered jobs and reshaped entire occupations. Now, in the midst of a global health crisis, a great reassessment is happening in the job market. The coronavirus outbreak has had a dramatic psychological effect on workers. People are reconsidering what they want to do and how they want to work, which over the long term will require them to refresh their skills or gain new ones.

While colleges and universities are uniquely positioned to fulfill these needs, they must do so while also tackling long-standing inequities on their campuses—as well as in the world beyond.

There is a yawning divide along racial and ethnic lines in postsecondary education—only 21

percent of U.S.-born Blacks and Latinos have at least a bachelor's degree compared to 37 percent of whites and 58 percent of Asians—an education gap that only has widened other disparities in life. In the past 40 years alone, unemployment rates for people of color have consistently been twice or more the rates for whites. That gap in turn leads to an imbalance in income and assets that separates Americans by social class.

Faced with a tight labor market in the great "jobs reassessment" brought on by the pandemic, employers are beginning to rethink qualifications and embrace skills-based hiring in order to find talent. But there is no guarantee that this reshuffling alone will close the equity gap.

Many of today's most severe talent shortages involve low-skill work. While these shortages have led to some run up in wages in retail, hospitality, and transportation, among others, there is unlikely to be real progress in narrowing income equality if the paths for rising into higher value work remain blocked.

"Are we going to take this moment to help low-wage workers move into the middle class and give them skills to thrive? Or are they just going to go back to low-wage

jobs that are dead ends?" asks Lawrence Katz, an economist at Harvard University. ¹

The challenges facing the post-Covid economy are too urgent to wait for the incremental changes that typically define higher education. We need to have a greater focus on career outcomes for

college graduates on the one hand and broader access to education throughout a person's lifetime on the other. A focus on outcomes means building more direct and easy-to-navigate pathways between education and work. A focus on access means aligning both the academic programs of a college to provide valuable skills and in-demand work and its structure and mission

to serve a broader community of mid-career workers.

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¹Steve Lohr, "The Pandemic Has Accelerated Demands for a More Skilled Work Force," New York Times, July 13, 2020.

"We have to change the culture of the institution so that it *owns* post-graduation success," says Josh Wyner, founder and executive director of the College Excellence Program at the Aspen Institute.

When colleges have embraced post-graduation success in the past, they have largely defined it very narrowly: the percentage of their graduates who were employed or pursuing further education after

commencement. But success after college also means institutions arming students with the skills and experiences for a better life and then broadening the definition beyond the individual student to the professions and society a

professions and society as a whole.

"Are we diversifying the professions and are we giving students in the community who need it most the opportunity to diversify the professions?" Wyner asks. Serving as an engine of mobility and equity is a natural role for universities. A wide range of postsecondary institutions—often deeply embedded in their communities and supported directly and indirectly by public dollars—are ideally positioned to address opportunity in the workforce.

To do so, however, higher education as a whole needs to think beyond simply the representation of first-

generation, low-income, and students of color on campus. For many institutions, regional economic growth has joined the historical mandate for knowledge creation as a central part of the college's mission.

Because the distance between people and opportunity is measured in skills, universities can teach those skills, not only to current students but also to those already in the workforce.



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Moving from Representation to Outcomes

What practical steps can universities take to foster better student outcomes as the core engine of equity?

We found in our research that there isn't just one lever to pull. The institutions that have succeeded on this front focus on the entire undergraduate lifecycle by

- Encouraging underrepresented students to consider majors that lead to careers with a positive financial return on investment (ROI);
- Assisting students in securing internships that lead to BA-required jobs after graduation; and

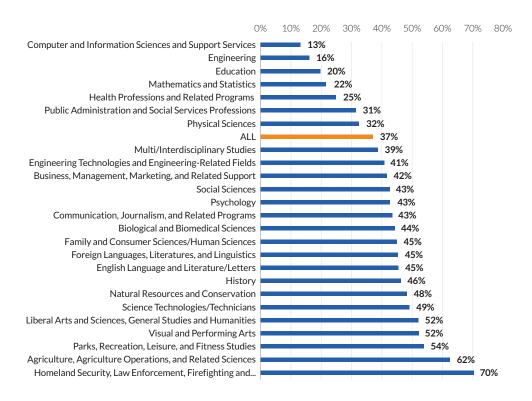
 Making diversity, equity, inclusion, and belonging central to the student experience.

The focus on ROI as a key metric in outcomes is certain to make some college leaders uncomfortable. Money, of course, is not the only outcome from college that matters, but it's naive to downplay its importance. Black and Hispanic students are disproportionately concentrated in majors with lower earnings, and that contributes to their higher likelihood of being underemployed after graduation. What's more, depressed earnings and underemployment can cause a

FIGURE 1 — Underemployment Varies by Major

Underemployment—defined as someone who has a bachelor's degree working in a job that does not typically require one—differs significantly depending on a student's program of study.

Percentage underemployed by major



Source: Emsi Burning Glass

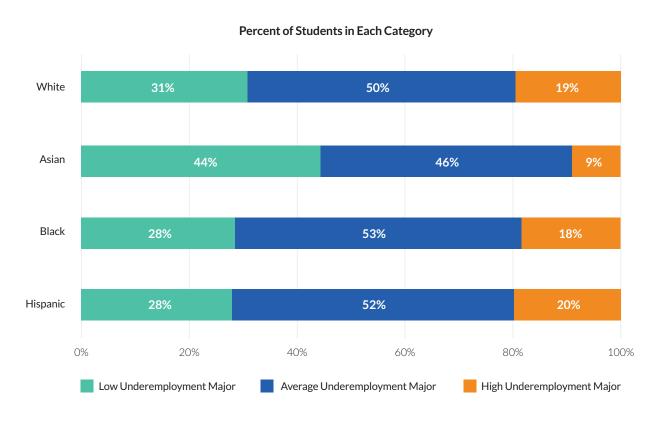
vicious cycle after graduation, resulting in less engaged alumni and a more challenging enrollment environment.

Black and Hispanic students were least likely to be enrolled in the majors with the lowest rates of underemployment.

Majors matter. The choice of college major is a significant factor in explaining the wide variations of earnings and employment rates for graduates. Overall, there is more than a two-fold difference in underemployment rates between bottom and top performing majors (see Figure 1).

Moreover, when the Burning Glass Institute examined majors by race and ethnicity, it found that Black and Hispanic students were least likely to be enrolled in the majors with the lowest rates of underemployment (see Figure 2). To be sure, Black and Hispanic students are more likely than their white and Asian peers to be in jobs requiring less than a bachelor's degree no matter their major—even when they graduate with degrees in engineering, education, and computer science (see Figure 3). But the opportunities for employment in science, technology, engineering, and math (STEM) fields are not only better for students of color but they provide higher career earnings, too.

FIGURE 2 — Black and Hispanic Students Are Less Likely To Be in Majors with Low Underemployment Rates

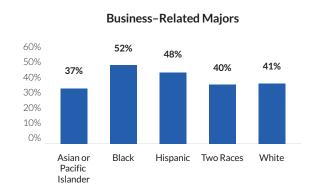


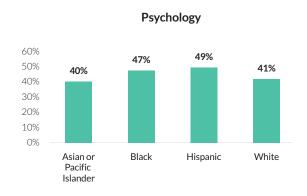
Note: Percentages may not add up to 100 because of rounding.

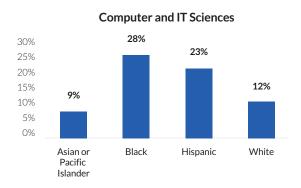
Source: Emsi Burning Glass

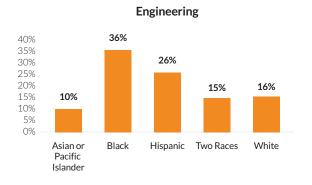
FIGURE 3 — Blacks and Hispanics More Likely To Be Underemployed No Matter Their Major

Percent Underemployed









Source: Emsi Burning Glass

Any suggestion that colleges encourage students to major in academic disciplines with better career outcomes is likely to be met with opposition on campuses from those departments that see these choices as a zero-sum game. But it's not. It's about college leaders promoting career fields that historically have lacked diversity in part because institutions have left the onus on student success to the students themselves. Now, helping students is both a moral and financial imperative for institutions.

Perhaps the best example of how institutions can encourage students of color, particularly in STEM

fields, is at the University of Maryland, Baltimore County (UMBC). For more than three decades, the highly successful Meyerhoff Scholarship Program has paid the tuition and fees for hundreds of Black students in science and engineering and built critical wrap-around services to help students succeed, including research experience and advisors. In 2019, the University of California campuses at Berkeley and San Diego partnered with the Chan Zuckerberg Initiative to put in place several UMBC practices, such as outreach to underrepresented high school students, research experiences, and peer counseling.

Internships and underemployment. Helping Black and Latino students get internships is also a vital step in improving their positioning for future success because they are less likely than Asian and white students to get the hands-on experience that is a stepping stone to a job requiring a bachelor's degree. On average, a student

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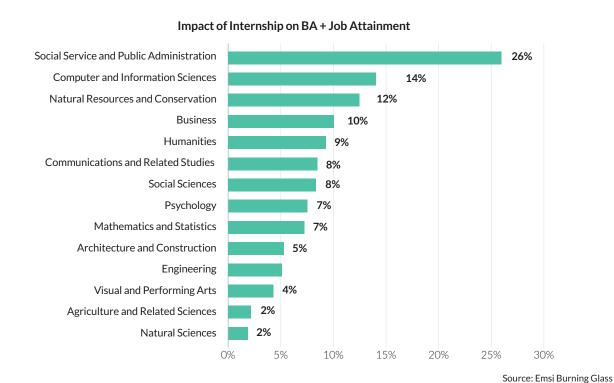
who lands an internship in college is 9 percent more likely to hold a BA-required job after graduation than students who don't (see Figure 4).

While internships are important to career success across the board, they are even more critical in certain majors. In the natural sciences, where a tight labor market already assures strong prospects for graduates, internships have little impact on underemployment. But students with majors in social services and public administration are 26 percent more likely to land a BAlevel job if they have an internship.

The boost provided by an internship has an even greater impact on Blacks and Hispanic students in certain STEM majors. Black students in computer science and IT majors who have internships, for example, are nearly 30 percent more likely to be in BA-required jobs after graduation; Hispanic students are 26 percent more likely.

Given how much is riding on internships, postsecondary institutions should make a more systematic effort to

FIGURE 4 — Where Internships Matter in Landing a Good Job



work with employers to help create those opportunities for all students, and for students of color in particular. Attention should be paid to using internships to strengthen career connections and practical skills for students in majors that currently don't perform well in terms of job outcomes. One approach for doing that is putting mentorship at the heart of the student

experience. Denison
University, for instance,
requires advising circles
for freshmen to acclimate
them to the university
and connect them to a
professor early in their
college career.

Colleges should also ensure students of color are integrated into the networks—from alumni groups to sports teams to Greek life—that are closely tied to future career success,

as well the career center itself.

That innovative companies prize diversity isn't surprising. The compelling financial case for corporate diversity has been well documented. One McKinsey study found that companies in the top-quartile of ethnic diversity on their executive teams outperformed those in the bottom-quartile by 36 percent in profitability. Similarly, a *Wall Street Journal*

analysis found that the 20 most diverse companies had an average stock return of 10 percent over five years, versus 4.2 percent for the 20 least diverse companies.

Colleges should also ensure students of color are integrated into the networks—from alumni groups to sports teams to Greek life—that are closely tied to future career success, as well the career center itself. At the Stevens Institute of Technology, every first-year student is assigned a career advisor, and during winter break freshmen and sophomores shadow alumni at their jobs, which requires students to research a variety of job titles and careers—often for the first time in their life.

Representation and recruitment. Research shows that companies that are the most innovative, that outperform their competitors, and are those that universities want their graduates to join, tend to be more diverse. And our analysis shows that those companies like to recruit from diverse colleges and universities. The Burning Glass Institute's research found that an institution's diversity is linked materially to improved outcomes for all students. So universities should do more to address their own diversity issues, thereby attracting companies to campus to recruit students for upwardly mobile jobs.

The Burning Glass Institute's analysis of recruiting data tells an equally powerful story. Diverse companies such as the energy sector's World Fuel Services or FedEx have a higher percentage of employees, including both white employees and employees of color, who attended diverse colleges, while the opposite is true for less diverse corporations such as Archer Daniels Midland and Merck & Company.

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² "Delivering Through Diversity," McKinsey & Company, January 2018.

Engaging a Broader Community of Learners

A commitment to diversity means more than just improving outcomes for traditional-age students. Universities must extend their approach on this front to include those already in the workforce. This means, on the one hand, delivering programs that can help underrepresented communities, who are too often left on the sidelines of economic prosperity, acquire the skills that enable them to move up. And it means, on the other, building programs that ensure a robust pipeline of diverse talent for the kinds of jobs that are critical to a community's future.

Playing this broader role in society is in keeping with universities' longstanding mission to produce well-prepared graduates and research know-how that build regional economies. Embracing this task will help all students and is especially important for those who need opportunity the most.

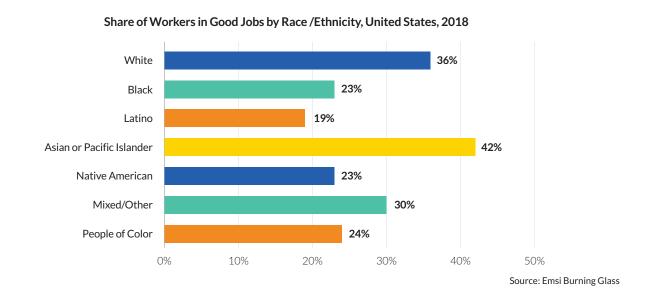
Grow the economy; grow opportunity; grow enrollments. Universities are already important economic anchors for their regions. By empowering diverse workers with the skills they need to get ahead, universities could also become engines for equitable growth in their communities.

A renewed focus on employment pathways more broadly is also in the self-interest of colleges and universities, helping them fill seats in the face of shrinking enrollments of teenagers. Working learners are a growth area for colleges. But as demographics shift, these learners are becoming much more diverse, so it is even more important that universities help foster strong career outcomes in populations of diverse workers.

To take on this expanded role in economic growth, universities must join forces with employers and workforce experts to identify jobs that are most

FIGURE 5 — Who Is in Future-Proof Jobs

Black and Latino workers are less likely to be in stable jobs with growing employment prospects, strong compensation, and upward career mobility.



relevant to the future of their region's economy. They can then build programs of study that direct graduates toward those high-value opportunities. This strategy shouldn't be limited to entry level jobs for recent graduates. Rather, it can easily be applied to supporting diverse working learners trying to get ahead later in their careers.

The first step is to think about how we should define a "good job"—the kind of job every institution wants its

graduates to have. One set of considerations includes practical factors such as strong compensation, stable or growing employment prospects, upward career

Whites and Asians/Pacific Islanders are much more secure than Black and Latino workers in "future-proof" jobs.

percent for Black workers and 19 percent for Hispanic employees (see Figure 5).

An additional method of analyzing jobs gives some hope for how universities can drive change, however. Jobs are essentially collections of skills, bundled together to achieve a particular goal. Understand the skills and you understand the job, in much the same way that understanding the genome lets you understand

the organism. And that granular level of understanding also allows you to understand the specific skills a worker needs to make connections between

jobs—measuring the exact difference between an entry level job and the next step on the career ladder.

Within a given occupation, even if it isn't a "good job," there are often distinct skills that offer a salary premium and could be leveraged to improve a worker's

mobility, and a lack of existential threats to the sector. By these measures, whites and Asians/Pacific Islanders are much more secure than Black and Latino workers in "future-proof" jobs. More than 40 percent of Asians/Pacific Islanders hold good jobs, compared with just 23

FIGURE 6 — The Transition Pathway: Leveraging Adjacent Skills for Advancement



prospects in a different occupation that offers much higher mobility. The challenge is to identify the additional skills needed to bridge the gap between the origin occupation and the destination occupation. (see Figure 6).

Reverse-engineering skills pathways for working

learners. Another way colleges and universities can serve the working learner is to reverse-engineer the skills needed for good jobs, identify the overlap between those skills and the skills of other, more diverse talent pools, and then create university programs that will fill the remaining gaps.

Universities are in an ideal position to construct pathways to develop existing skills into those necessary for desirable occupations. These pathways are particularly critical for working learners, who may not have made the best start on their careers and who deserve a second chance through higher education.

Black and Latino sales workers, for example, would earn more as wholesale sales representatives, as would computer support specialists as database administrators—they just need to acquire some additional skills (see Figure 7).

Nondegree programs focused on reskilling and upskilling will play an essential role in this process as working learners seek to pick up specific skills rather than full credentials. Take Des Moines Area Community College as an example. It has expanded its noncredit programs to get new classes up and running more quickly than in the past and teach students just enough to start a career. The goal isn't to give students everything they need to know for a job, but enough to get them started with a local employer. Taking just a few such classes is both less expensive and more manageable than pursuing a traditional degree.

FIGURE 7 — More Skills, More Pay

By acquiring just a small set of new skills, Black and Latino computer support specialists would earn more as database administrators.

Skills that offer the highest salary premium in the origin occupation

Skills from the origin occupation that add value in the destination occupation

Skills to acquire to bridge the gap to the destination occupation

Skill	Recall Rate	Salary Premium
SQL	7%	\$12,363
Oral Communication	5%	\$12,158
Application Support	8%	\$11,820
Planning	8%	\$10,930
Linux	6%	\$10,273

Skill	Recall in Origin	Recall in Destination	Salary Premium
SQL	7%	48%	\$6,396
Linux	6%	13%	\$4,787
Unix	3%	10%	\$8,196

Skill	Destination	Premium
Extraction Transformation and Loading (ETL)	19%	\$9,685
Performance Tuning	16%	\$10,010
Data Warehousing	13%	\$9,337
Python	11%	\$12,326
Unix	10%	\$8,196

Defining Terms

Recall rate: % of the time a given skill was present in the specified occupation. For example, only 7% of starting point occupations ask for SQL but, when they do, it's worth a \$12,000 salary premium.

Recall in destination: % of the time a given skill was present in the next step occupation, For example, SQL is indicated in 48% of postings but, accordingly, it's less of a premium skill because it's almost assumed.

Source: Emsi Burning Glass

How Universities Can Drive Equitable Growth: Examples from the Field

There is much universities could do, and some are doing already, to build programs that will allow underrepresented talent pools in their communities to access opportunity.

Cleveland is a case in point. Looking ahead, Cleveland leaders see that having an adequate pool of industrial production managers, who oversee the daily operations of manufacturing plants, is important to the city's economic future. Yet the region's current talent base in that field is insufficient.

But Cleveland does have a much broader talent pool of workers with many of the right skills for this kind of role. Indeed, it's three times the size of the narrowly defined pool of those with the precise qualifications needed. What's more, many in this larger group of workers who could be upskilled into industrial production manager roles are Black and Hispanic workers.

This is where universities come in.

Recognizing the need to develop industrial production managers, they could construct learning pathways that create an efficient pipeline of talent and also ensure that people of color in Cleveland have access to these jobs of the future. For example, the pool of people working right now as production supervisors in Cleveland is more than twice as big—and 30 percent more diverse—than the pool for industrial production managers.

Such supervisors already have many of the right skills to become managers. A program that teaches them skills like budgeting, planning, and quality management could create ladders for relatively more diverse production-supervisor talent to climb into these much better paying, faster growing roles that will also power the Cleveland economy. A university that launches such a program would not only be a critical link in the region's talent supply chain but it would also be creating an escalator for diverse talent by opening access to higher value careers.

Narrowing the gap. In other communities, taking a granular look at skills needs yields similar opportunities for universities to create routes to upward mobility.

In **Birmingham**, Alabama, for example, information technology is a major growth industry. Computer support specialists earn a little over \$50,000 annually



on average, based on the skills in computer science, management information systems, and IT they acquire in bachelor's degree programs. Some 30 percent are people of color.

With some additional skills, including information security, network security, and National Institute of Standards and Technology (NIST) certification, the same workers could move into cybersecurity analyst positions. The average salary for those jobs in Birmingham is \$79,000, and just 11 percent of that workforce is made up of people of color. A university that offers the classes and credentials needed to narrow the gap would be a crucial player in advancing its mission while advancing diversity in the regional economy.

Robert Morris University is doing just that with employees from the University of **Pittsburgh** Medical Center (UPMC). In a community where healthcare is a growth industry, UPMC employees can take reduced-tuition leadership training programs offered by Robert

Morris and apply credits toward its Leadership and Organizational Change Certificate programs or to its Master of Science in Organizational Leadership degree. Those programs are offered online, increasing their appeal to working adults seeking to build their skills.

Increasingly, employers and universities agree on the need to help working learners along multiple qualifications pathways. That help might involve a multi-step pathway in which a file clerk learns budgeting and administrative support to become a better-paid office assistant, then later earns a bachelor's degree in accounting or finance to become a budget analyst at a significantly higher salary. Or a university could offer a one-step pathway in which a human resources assistant with a bachelor's degree acquires skills in talent acquisition and applicant tracking systems to become a more highly compensated recruiter.



A Final Word

To reach their true potential as engines of equity, universities need to do two things at once. They must take a student-focused view about positioning undergraduates for success beyond graduation. And they must also take a broader view, developing pipelines of the talent most needed to drive regional economic growth and, in so doing, ensuring that diverse workers have a stake in their community's prosperity.

Beyond the disruption of the Covid-19 pandemic, higher education faces a looming challenge for the future as well. It needs to address the needs of the huge numbers of people who are not enrolled in higher education, particularly the 36 million or so Americans, disproportionately Black and Latino, who have some college and no degree. Economically speaking, these workers are no better off than those who never attended college at all—and usually worse off given their disproportionate debt loads. This strategy offers students and institutions meaningful opportunities to finish a job only half done.

Mapping job demands, creating specific educational sequences, and guiding students most in need along those pathways is a proven solution to all these challenges.

Executing that strategy will help universities thrive as they show their effectiveness in building regional economies. And it will expand opportunities for significantly more students, including far too many low-income students of color who haven't yet experienced how education can foster upward mobility.

With this approach, higher education can work to ensure that, as regions grow, they see equitable growth. Not incidentally, playing this role will help ensure that colleges and universities make the most of their considerable potential to help students' post-graduation success as well.



About the authors

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